Working Group Outline
Evidence Presentation Equipment

Evidence presentation technologies provide a way to present evidence electronically and simultaneously to everyone in the courtroom. An evidence presentation system may include the following components: (1) evidence camera; (2) laptop computer; (3) electronic whiteboard; (3) digital monitors in the jury box and other places in the courtroom; (4) digital projector and projection screen; (5) color video printer; (6) annotation equipment; and (7) kill switch and control system. These technologies may be useful in a variety of proceedings including jury trials, bench trials, and evidentiary hearings, and may be used to present images of inanimate objects, photographs, and documents and "slide shows" of such evidence and related argument to the jury. The equipment is also used to show animations and simulations, but another working group is considering issues related to this.

Drawing on the morning's demonstrations, this group will consider how empirical research can inform the use of evidence presentation equipment in the courts. The group will attempt to translate into empirical questions the issues inherent in its use, and identify the social and behavioral science theories on which the research might be based. Finally, the group will suggest priorities for research in the coming years.

 We hope the group's report on Friday will address the following:

1. What issues related to the use of evidence presentation equipment by the courts are the most important? Does this differ for different types of court proceedings (e.g., civil versus criminal, trial versus pretrial, trial versus appellate courts)? Does it depend on your point of view (i.e., society as a whole? courts? litigants? attorneys?)

2. Are the important questions susceptible to empirical study? If so, what are the corresponding empirical questions and on what social or behavioral science theory can the research be based? (The group may want to select just a few of the more important topics to consider in more detail here.)

3. What factors (economic, political, etc.) are likely to constrain the empirical research that can be conducted?

To Get the Group Started:

The topic of this working group is very broad. To get the group started, we've identified some questions related to the use of evidence presentation equipment. Please do not let our thinking constrain yours.

•   What effect does presenting evidence to the jury via a large projection screen versus individual or shared small monitors have on the jurors' attention, comprehension, and memory for testimony and other evidence? Does the placement and size of the monitors or the projection screen encourage jurors to pay undue attention to the monitor or screen at the

expense of observing in-court witnesses? With what type of evidence, if any, do larger images seen on projection screens distort the evidence in a relevant way?

- How does use of the equipment affect jurors' perceptions of the case strength? (Think about Cialdini's PowerPoint experiment). What is the effect of one side, but not the other, using the equipment?

- Does presenting evidence via an evidence presentation system enhance or diminish the quality of jury deliberations and decision-making, and if so, why? For example, jurors' attention is more focused on the evidence since it is on a monitor or projection screen; jurors see the exhibit as the witness describes critical details; jurors' attention can be drawn to specific parts of the document with highlighting and zooming in and enlarging; jurors can view the exhibits in an unhurried way because they do not have to pass it to the next juror; it saves time (by eliminating time lapses as jurors locate documents in juror notebooks or as documents are passed among jurors) and thus reduce jurors' boredom; jurors' memories for the evidence are more similar and more focused on the critical details than when the evidence is presented in a traditional way. On the other hand, is it more difficult to ensure jurors see and use only that evidence that is ultimately admitted, and hear argument that is appropriate?

- How, if at all, do the following factors affects judges' and jurors' attention, comprehension, and memory?
  - Size, Scale, and lack of context: Does distorting the scale (i.e., zooming in, showing enlargements) lead jurors to misinterpret the evidence? Do larger than life depictions of inanimate objects distort jurors' perceptions of them in a way that is relevant to the case (e.g., makes a gun look larger than it is; makes a small detail appear more obvious to the "naked" eye; make fine print look more readable)? What impact does the lack of context have on the interpretation of the evidence?
  - Color: Does the type of presentation system used affect in a meaningful way the colors in a photograph?
  - Gore: Does presentation on a projection screen lower the threshold for what is considered prejudicial?

- How does judges' and jurors' familiarity with technology affect their receptivity to evidence presented electronically?

- Given the ease with which photographs can be altered and manipulated, do judges and jurors unduly rely on the accuracy of digital photographs to depict the content and completeness of a scene as it actually appeared? Are judges and jurors able to critically evaluate any measures taken to ensure the accuracy of photographs? How, if at all, does a judge's or juror's familiarity with the photographic process (i.e., experience with digital photography and image manipulation software such as Adobe PhotoShop) affect his or her ability to assess the authenticity of the depicted image?

- Similarly, are methods to ensure the authenticity of digital documents adequate? Given the ease with which digital documents can be altered, do judges and jurors unduly rely on party

representations of authenticity? Are judges and jurors able to critically assess measures taken to ensure authenticity?